Final Summary
Steller Sea Lion Recovery Team Meeting
Alaska Fisheries Science Center, Seattle, Washington
10-12 November 2004

Bob Small, Chair of the Steller Sea Lion Recovery Team (SSLRT or RT), opened the meeting at 08:45 on November 10. He introduced Sharon Melin, who will substitute for Shane Capron during the next six months. Small reviewed the agenda, followed by the status of each section listed in most recent draft Table of Contents. Generally, he believes section III (Biology and Life History) is complete, while section IV (Review of Conservation Measures) is close to completion. Section V (Recovery Plan for the Western Stock) subsections V.A (Population Status and Trend) and V.B (Factors Potentially Influencing the Population) are largely complete with the exception of V.B.8 (Nutritional Stress) and V.B.10 (Cumulative Effects and threats table). Small will prepare a first draft of subsection V.C (Recovery Strategy). The Stepdown Outline (V.D.3) and Narratives (V.D.4) for subsection V.D (Recovery Plan) are nearing completion, but the subsection V.D.2 (Criteria for Evaluating Population Status) awaits completion of the PVA. At its previous meeting, the RT agreed to incorporate plans for Implementation Monitoring (nominally V.D.6 in the outline) within each threat Narrative. The status of section VI (Recovery Plan for the Eastern Stock) will be reviewed at this meeting.

Discussion of Conservation Measures

RT members discussed apparent inconsistencies between passages in this section and the threats assessment, and identified a need to improve the consistency between these sections and later threat rankings. For example, incidental take in commercial fishing was given a relatively "high" threat ranking (above 200 animals per year), but this section cites observer reports of only 29 takes in recent years. RT members were uncertain whether the threat ranking was justified based on incidental takes of SSL in a Russian herring fishery, potential delayed mortality from ingested hooks, or other factors. The threat should reflect only entanglement in active gear, since the RT had decided earlier that entanglement in inactive gear would be considered a separate threat (i.e., marine debris).

Subsection IV.3 (Reduced Prey Availability due to Fisheries) sparked an extended discussion of fishery management practices. Passages in this subsection suggest there has been great success relocating fisheries, but other passages note that management measures have not significantly reduced harvest in Critical Habitat. Earlier NMFS Biological Opinions stated that this "zonal" management approach was sufficient to preclude findings of "jeopardy". Most RT members hoped this subsection would give readers a sense of the types of fishery management actions that have been taken, and viewed the text and tabular presentations as useful. They noted that there have been area catch limits to benefit SSL, but acknowledged that no explicit allowances have been made for SSL at a global or Acceptable Biological Catch (ABC) level. A few RT members felt that the presentation was subjective and insufficiently critical of NMFS and NPFMC fishery management. Those RT members objected to statements that implied catch limits were imposed to benefit SSL, believing that the measures were actually adopted for a variety of single-species fishery management purposes and that the current draft RP mischaracterizes the true purpose of those measures. They suggested the tabular presentations have omitted measures the NPFMC

has taken that may not be beneficial to SSL, and noted that some measures cited as beneficial were reversed by later Council decisions. They maintained that under NPFMC management, fisheries remain concentrated in time and space and harvests in Critical Habitat are as high as ever. They believed the RT should demand continued evaluation of fishery harvests inside and outside Critical Habitat. Small asked a subgroup of RT members (Behnken, Fraser, Stump, and Wynne) to suggest a revision that reflects all points of view.

RT members asked whether the RP would attempt to redefine Critical Habitat, since existing definitions probably do not reflect current SSL needs. Although some outside the RT may expect it, Small noted that the RT has been directed to avoid a qualitative analysis of Critical Habitat. The RP may lay out the biological background needed to redefine Critical Habitat, but the redefinition itself is an agency prerogative.

Discussion of Stepdown Outline Narratives

Four of the five proposed Narrative sections were available for review. Small summarized the goals for these sections. Each Narrative section is generally focused around one of the five ESA listing factors. Every proposed recovery action should be linked to a threat, and provide a brief rationale for how it alleviates the threat. Recovery actions may be short-term or long-term, and should be as site-specific as possible. Each should be described as a discrete action that stands alone. Narratives should integrate a sense of how monitoring should be accomplished for each action. Small recommended that where appropriate, RT members could draw recommendations from the original RP or the SSLRT workshops of the late 1990s.

In addition to specific editorial suggestions, the following comments of a more general nature were offered:

- Several RT members noted differences in paragraph lengths, levels of detail, writing styles, and numbering patterns used by the writers of each Narrative section; some suggested that standards are needed to promote consistency.

- Some RT members believed it confusing to organize Section V.B (Factors Potentially Influencing the Population) according to the threats table, while organizing Section V.D (Recovery Plan) according to the five ESA listing factors. Small suggested including a table to cross-reference threats, recovery actions, and listing factors.

- Several RT members were uncertain how to categorize recovery actions that deal with population assessment and life history research. This research is not associated with a particular listing factor or threat, but provides context for interpretation of threat-related data. Small suggested that those activities be included as basic monitoring.

- Some RT members believed that action statements like “determine if animals are nutritionally stressed” are unrealistic. They suggested that “explore” or “more accurately assess” are better descriptions of what can be accomplished. The RT should acknowledge that data are sparse in many areas.

- Some RT members objected to the tone of some sections which inferred the RT had reached a conclusion about the relative importance of particular threats. Small agreed that the RT has not held those discussions, and cautioned writers to keep these sections as factual, objective, and neutral in tone as possible.

Overview of Process for Completing the Recovery Plan

The completed RP will be transmitted to NMFS for distribution to formal 60-day public and peer review. NMFS must document and respond to all comments received during this review. The NMFS Headquarters will also conduct its own internal review focusing on the adequacy of guidance provided by the recovery criteria. Since large portions of the first draft RP are nearing completion, Capron suggested that the RT consider which of these sections it wishes to submit for outside scientific review. Such reviews are not mandatory, but they can help avoid surprises during the formal public and peer review processes. Funds can be made available to pay reviewers should that be necessary.

Capron also suggested that the RT may wish to hire assistance in several other areas. While NMFS can provide support for preparation of graphic materials, the RT may wish to hire an editor to streamline the document and review it for consistency. RT members suggested that this individual be prepared to manage scientific citations as well. Capron also suggested that the RT consider assistance with the economic analyses associated with estimating costs of recovery actions to the public and government. Several RT members expressed concern that Capron was suggesting a new and potentially overwhelming RP requirement. They noted that costs could vary widely, depending on factors such as the inclusion of opportunity costs, or whether the tasks fell to independent contractors or to agencies with salaried staffs. Costs for actions already required to comply with other laws may also be hard to evaluate. Others noted that economic analyses are often difficult and frequently imprecise, and recalled no legal requirement that they be included in a RP. Capron replied that he was suggesting options, not stating requirements. He noted that the RT must provide its best estimate of the costs associated with recovering SSL, and must document the basis for those estimates in the RP.

Review of Recovery Criteria

Capron described the recovery criteria as one of the most important sections of the RP from the agency's perspective, due to the risk of litigation should the agency use inadequate criteria to delist or downlist an ESA species. He emphasized that recovery criteria must be objective, measurable, and relate to the five listing factors described in section 4(a)(1) of the ESA. Recovery criteria may take a variety of forms, and Capron provided a guideline document from the USFWS containing examples of appropriate and inappropriate criteria. While demographic criteria from PVA analyses are common, other possible criteria could specify subpopulation demography, birth rates, age structures, biomass, prey availability, or predation rates. Several recent salmon RPs specify persistence standards. Delisting and downlisting are separate actions, and each may have its own quantitative and qualitative criteria.

Capron noted that there are several ways to address the connection between threats, the five listing factors, and recovery criteria. Each threat may be reflected in a recovery criterion, but in

its simplest form the recovery criteria are a checklist of actions or conditions that must occur before the agency may delist a species. These criteria should be as clear and simple as possible. Since the current effort is a RP revision, the criteria should reflect current threats rather than those cited at the time of the original listing.

Some RT members were concerned that threats with no possible mitigation (e.g., predation by killer whales) or threats about which little is known might lead to recommendations for prohibitively expensive research projects that could preclude any recovery designation. Capron acknowledged that some factors (e.g., excessive predation rates) could prevent recovery. He suggested that the RT limit research-based recovery criteria to those things it would need to know before it could be comfortable with delisting. He asked whether the RT could recommend delisting if the relationships between fishery removals, SSL prey availability, and SSL abundance were unknown, even if arbitrary SSL abundance criteria are met. Some RT members suggested they might recommend delisting under those conditions if they knew adequate control mechanisms would remain in place; others disagreed, maintaining that there is too much uncertainty about the true impacts of fisheries on SSL. Still others suggested that fisheries have been regulated because they are one of the few things the agency can control, and were skeptical those restrictions are likely to change regardless of SSL abundance. Capron suggested that some adaptive management scenarios could provide a framework for gradual relaxation of fishing restrictions as the SSL population recovers.

Status of PVA Analysis
Dan Goodman, Montana State University

The existence of regime-like environmental variation is now generally accepted. Scientists recognize that there are periods of time when the environment remains in a particular state, and that periodically this state changes. When these changes occur, local populations of fish and marine mammals can be affected. Goodman cited a monk seal example in which population numbers remained consistent over decadal periods, and a chum salmon example in which productivity changed significantly and abruptly during the 1980s. He suggested that both patterns represent biological responses to environmental variation. While oceanographic data series may extend 50-60 years, patterns in tree rings correlate strongly with meteorological and oceanographic relationships and can be used to reconstruct Pacific Decadal Oscillation (PDO) patterns back hundreds of years.

While PDO is only one of several environmental indices, most of these indices are inter-related. PDO may not itself be the driver of biologic change, but environmental variation in some form is a likely driver and PDO is a convenient representation of this variation. The variation observed in the PDO tends to occur in blocks of years with temporal autocorrelation, and can be analyzed using classical mathematical time series techniques. These characteristics fit a 1^{st} order stationary Gaussian model, while characteristics of a 2-phase system are reproducible in a 2-state Markovian model. These models provide a statistical basis to describe the driver.

The time series of available SSL data is limited. Accurate data are available for only about 20 years, and protections from direct human-caused mortality were in place for only about half of this period. Given these limitations, it might still be possible to develop a simple model that may

not be stunningly satisfactory from an academic perspective but is still useful for RP purposes. Goodman suggested a neutral PVA model with regimes, incorporating random variation in population growth rates that occur during blocks of time. Characteristics of this model include (a) a long-term mean of zero growth, (b) growth rates with temporal persistence, and (c) no density dependence in growth rates except a ceiling. A critical assumption of the zero-growth mean is that all important anthropogenic impacts have been removed or mitigated. Inputs to the model with those assumptions include initial population size, the population ceiling, the quasi-extinction level (e.g., how low could the population go before experiencing negative genetic impacts), environmental variance (e.g., how frequently do declines of a given magnitude occur), and population structure (e.g., population components based on movements between rookeries, genetics, etc.). The model will then score the predicted probabilities of extinction over a designated period at a variety of initial population sizes. Depending on the population structure selected, these scores could reflect either a subpopulation or an entire DPS.

Goodman suggested that such a model could be used in a variety of ways. If the RT wishes to establish or justify particular population-size delisting criteria, the model could be run at a variety of initial population sizes to estimate the probability of extinction over a set period. Alternatively, the model could be run using the current population level as the starting point to project the time needed to achieve the population-size aspect of recovery.

The model will not replace the need for necessary research and monitoring. Neither will it provide sufficient detail to determine whether closures of a specific magnitude are necessary. Goodman also stated that the model would be of little use in explaining the severe SSL population declines observed during the 1980s. He suggested that a significant part of those declines were likely anthropogenic, and that the brainstorming needed to select likely growth rate parameters would demonstrate the implausibility of natural causes for the 1980s decline (i.e., if that sort of decline was common historically, it should be apparent through genetic bottlenecks, etc.). He left to the RT the task of providing a rationale for (a) what it takes to mitigate anthropogenic effects, (b) how significant those influences were in the past, and (c) what it will take to keep those effects in mitigation.

RT questions and discussion:

- RT members asked how other shorter-term environmental fluctuations (e.g., El Niño) that appear to affect pinniped populations would affect the model. Goodman suggested that those events were probably incorporated in the existing model, since the frequency of El Niño events is correlated with PDO. While El Niño may be influential on a short term scale, over a longer term its impacts should be smoothed.

- RT members were concerned about the model assumption that there are no anthropogenic influences on the population. Some noted that humans have affected SSL for hundreds of years, and that there are anthropogenic effects other than fishing (e.g., entanglements, contaminants, etc.) that may be beyond effective control. Some might even argue that there are anthropogenic effects (e.g., whaling) that could exert a positive influence on SSL populations. Goodman noted that the existence of relatively minor anthropogenic effects that do not limit SSL do not invalidate the model. Others were concerned that the model

assumption could imply an indefinite extension of current restrictions on fishing regardless of SSL population status. Goodman suggested that adaptive management strategies and experiments to test the effectiveness of current restrictions offered the best hope for fishing interests.

- Some RT members were concerned whether the model included sufficient safeguards to prevent mistaken conclusions. Goodman suggested that the model is protected against false negatives. If delisting occurs too soon, subsequent population declines should occur slowly and from a level that would permit timely relisting if necessary. To those concerned about the possibility of epizootics or other catastrophes, Goodman noted that those events are of low probability and are geographically discrete, so they could be addressed by hedging quasi-extinction levels and sub-population goals. He argued against including provisions for factors like these in the model, favoring a simpler functional model that would not be too misleading when used. If undocumented anthropogenic effects are holding SSL populations from recovery, the simple model will suggest the correct action (do not delist) for the wrong reason; i.e., the population levels the model suggests for delisting will take longer to achieve. If SSL populations are actually so variable that declines like those of the 1980s are natural events, that fact will become apparent soon.

- Some RT members suggested that IUCN-style generic criteria might be better that PVA, since PVA requires so many assumptions. Goodman disagreed, believing that good PVA models incorporate real-world uncertainty. PVA provides an objective way to estimate the population sizes needed for subpopulations. He noted that even the IUCN criteria incorporate an implicit PVA, because they include a probability of extinction within a given period. Goodman maintained that a generic standard would not be superior to a detailed examination of a specific population.

Work in Small Groups

The RT spent approximately three hours over two days in smaller groups with draft sections of the RP. These groups addressed PVA and recovery criteria, stepdown outline Narratives, section V.B.8 – Nutritional Stress, and the threats assessment.

Discussion of the Recovery Plan for the Eastern DPS

Pitcher described the current status of the Eastern DPS. There are currently about five SSL rookeries in Southeast Alaska, three in British Columbia, none in Washington, two in Oregon, and three or four in California. SSL populations at the rookeries north of California have increased at approximately 3% per year. In historic terms, the abundance of SSL in Southeast Alaska is greater than at any time in the previous 100 years, while abundance in British Columbia has returned to levels recorded prior to the predator control programs of the late 1890s. Counts at Washington haulouts are somewhat less than their historic peaks, but abundance in Oregon has more than doubled since the early 1970s. Conditions in California are mixed. California did not have consistent SSL surveys until the 1970s. Although SSL abundance levels at the two northern California rookeries are comparable to historic estimates, SSL abundance at the two southernmost rookeries (Año Nuevo, and possibly Farallon) is significantly lower than recorded historic levels. SSL occurred in relatively smaller numbers in the area south of Año

Nuevo to the Channel Islands, but there is uncertainty regarding how many of those sites were rookeries. Similar trends in SSL distribution are seen in the southern distribution of SSL on the Asian side of the Pacific.

RT members asked about confidence in the expansion factor used by state agencies to expand pup counts to total SSL population estimates. Pitcher noted that NMFS researchers have independently developed similar expansion estimates, but acknowledged that the expansions can be affected by sex/age composition, reproduction rates, and early pup mortality. While there is no way to put real confidence parameters around the estimate of absolute numbers, the underlying population trend data are solid. The absolute population numbers are subject to bias in either direction.

The RT discussed how the southern California segment of the SSL population should be viewed relative to the Eastern DPS. Some suggested that the RP could list rookeries used in the early 1900s that are currently abandoned, but others noted that the term "rookery" has been used interchangeably with "haulout" in the past; only recently has the designation "rookery" been limited to sites that support more than 50 pup births per year. There is little evidence from branded animals to suggest extensive movement between areas, but there is no evidence from archeology that SSL were ever common on the Channel Islands --- either they were never present or they were too large for indigenous peoples to handle. Some noted that there is currently no strong genetic evidence for groupings of unique haplotypes within the Eastern DPS; others encouraged the collection of additional samples from Año Nuevo to confirm current assumptions about population structure. RT members noted that since SSL at other California sites are near historic levels, concerns are principally focused on the Año Nuevo rookery. Some thought that a level of variability is expected at the periphery of a species' range, and requiring that every rookery in the DPS show an increasing population trend may place undue emphasis on the southern portion of the range. They suggested that loss of this portion of the SSL range may be more of a MMPA issue. Small recommended that RT members continue to develop recovery criteria for the Eastern DPS as a unit. If those criteria are met, then he suggested the RT might recommend that NMFS conduct a status review to assess the significance of California SSL to the Eastern DPS.

RT members recognized that illegal shooting was and remains a significant source of SSL injury in the southern portion of its range. In recent years, disturbance by tour boats has also become a significant issue. While most shooting reports (except those from recovery centers) must be considered anecdotal and most documented cases involve California sea lions, few doubted that the practice continues and could threaten SSL. Several RT members expressed concern that delisting the Eastern DPS could lead to a resumption of shooting. A few were also uncomfortable with the concept that West Coast SSL populations could be at carrying capacity and felt that Eastern DPS threat issues were being treated dismissively. NMFS representatives assured the RT that MMPA prohibitions on shooting and disturbance will remain regardless of ESA status, and RT members noted that additional protections are offered by the recent development of marine sanctuaries in the region. NMFS representatives cautioned the RT to limit its recommendations for recovery actions to those tasks that must be completed before recovery. Recommendations for post-recovery monitoring can be made in another section of the plan.

Discussion of Western DPS Threats Assessment

The RT discussed at length the draft RP's references to a report (Goodman et al. 2002) that discussed the NPFMC's groundfish management plan relative to ecosystem management concerns. Some RT members objected to the characterization of the Goodman report in the draft threats assessment and nutritional stress sections of the RP as too simplistic; they suggested the summaries implied more definitive conclusions than those in the original report. The draft RP, for example, suggests a direct relationship between the population sizes of SSL and pollock; the potential for prey-switching appears to be ignored. Some also said that the summary suggests the NPFMC follows conventional management practices, while they believe the Council actually provides safeguards that go beyond conventional practices. Those supporting the draft RP language described it as an attempt to show that Council FMPs deal with predation as units per capita and that as a fish stock declines under this approach so does predation. Some suggested it was naïve to presume that sequential exploitation of a previously unexploited ecosystem would have no effect on top predators, stating that stock managers do not deal with predation concerns in single-stock fishery management structures.

Goodman provided a brief summary of the report's major conclusions and responded to RT questions. He noted that the report is long and can be selectively quoted, and that the committee of authors often viewed the same data from different perspectives. The committee concluded that while the Council's groundfish FMP conformed to the letter of the law regarding MSFCMA requirements for ecosystem management and its standards for MSY management were relatively conservative when compared to FMPs worldwide, it still was not crafted to specifically address ecosystem needs. FMP natural mortality parameters do not provide a constant prey supply for predators. In response to RT questions, Goodman noted that the FMP uses a fishing mortality strategy rather than an escapement goal strategy, and that it is inaccurate to characterize the practice as "fishing down a pristine biomass". Fishing plans that reduce spawning biomass by 40% do not necessarily reduce total target species biomass by 40%, since the impacts on different age classes are unequal. Fishing models start with a crude estimate of current spawning biomass and estimate the fishing necessary to reduce that biomass by 40%. Fishing pressure year-to-year then rides a "roller coaster" based on the size of new age classes that recruit to the fishery. Goodman noted that few committees have been willing to address whether the harvest of multiple fish species actually reduces the prey field for SSL. Most address this issue in broad generalities since neither the size of non-commercial prey populations nor the view of the prey field from the perspective of SSL is known. There are currently insufficient data to fine tune natural mortality parameters to explicitly reflect SSL predation, but Goodman noted that some FMPs in southern oceans set aside a portion of production specifically for predators.

Small acknowledged that achieving consensus on these issues would be difficult, but challenged the RT to lay out both points of view objectively. He asked those with concerns to send suggested text to Fritz and others on the subgroup responsible for drafting this section. A core group of RT members will polish this and other sections of the draft for flow and consistency. Once the RT has made its best attempt at a balanced draft, he suggested that this might be a section submitted for early outside review.

Other editorial comments to this section included discussion of the written explanations for scorings in the threats table. RT members recommended a balanced approach to the use of citations in this text (i.e., if literature citations are used to justify a particular threat rating, equivalent citations should be used to support the alternative view). Several RT members believed that this review of threat scoring was useful, and expressed interest in revisiting the threats table once the RT has made it clear what each score signifies.

Discussion of Nutritional Stress

Time permitted only a brief review of the draft section V.B.8 (Nutritional Stress). Several editorial suggestions were made, the most substantive of which involved replacing text and tabular descriptions of fish abundance trends with a graphical presentation. RT members suggested that figures drawn from the 2000 BiOp might be more effective.

SSLRT Meeting Schedule

The next meeting of the SSLRT was not scheduled. Small hopes that a date in late February or early March 2005 can be selected once he has a better sense of when current tasks can be completed and which tasks remain outstanding. He hopes that he and a core group of RT members can have a complete draft of the RP ready for distribution prior to the next meeting.

The meeting adjourned at approximately 14:40 on November 12.

Table 1. Attendance at the meeting of the Steller Sea Lion Recovery Team held 10-12 November 2004 at the Alaska Fisheries Science Center, Seattle, Washington.

*	Shannon Atkinson	Alaska Sea Life Center & University of Alaska, Fairbanks
*	Linda Behnken	Alaska Longline Fishermen's Association
~	Vernon Byrd	U.S. Fish & Wildlife Service
	Shane Capron	National Marine Fisheries Service, OPR
†	Al Didier	Pacific States Marine Fisheries Commission
	Tom Eagle	National Marine Fisheries Service, HQ
*	Denby Lloyd	Alaska Department of Fish and Game
*	Dave Fraser	F/V Muir Milach
*	Lowell Fritz	National Marine Fisheries Service
*	Tom Gelatt	National Marine Fisheries Service
	Dan Goodman	Montana State University
*	Dave Hanson	Pacific States Marine Fisheries Commission
~	Lianna Jack	Alaska Sea Otter and Steller Sea Lion Commission
	Sharon Melin	National Marine Fisheries Service
~	Donna Parker	F/V Arctic Storm
*	Ken Pitcher	Alaska Department of Fish and Game
	Mike Simpkins	Marine Mammal Commission
**	Bob Small	Alaska Department of Fish and Game
~	Alan Springer	University of Alaska, Fairbanks
*	Ken Stump	
*	Andrew Trites	University of British Columbia & North Pacific Universities Marine Mammal Research Consortium
*	Terrie Williams	University of California, Santa Cruz
	Bill Wilson	North Pacific Fishery Management Council
*	Kate Wynne	University of Alaska, Fairbanks

* Steller Sea Lion Recovery Team Member
~ Steller Sea Lion Recovery Team Member, absent
****** Chair, Steller Sea Lion Recovery Team
† Rapporteur

STELLER SEA LION RECOVERY TEAM MEETING

10-12 November 2004
Alaska Fisheries Science Center
Traynor Room (Next to Room 1057)
Seattle, Washington
Draft Agenda

Wednesday, 10 November

8:30 am

1. Review and approval of agenda
2. Recovery Plan status and remaining work (further discussed under item #5)

8:45 am

3. Review and finalize sections of the Recovery Plan:
    - Conservation Measures
    - Narrative

12:00 pm – Lunch Break

1:15 – 4:30 pm

4. Continue to review and finalize sections of the Recovery Plan:
    - Narrative
    - Nutritional Stress

After Dinner: Work in subgroups

Thursday, 11 November

8:30 am

5. Overview of remaining work and process for completion of revised Recovery Plan – Shane
6. Recovery Criteria – Western DPS
    - Qualitative criteria: 5 ESA listing factors and 'threats criteria'
    - Status of PVA – Dan Goodman
7. Eastern DPS
    - Population assessment
    - Recovery criteria
    - Remaining revisions needed for Recovery Plan

12:00 pm – Lunch Break

1:15 – 4:30 pm

8. Work in subgroups
    - PVA and recovery criteria
    - Narrative
    - Nutritional Stress
    - Threats

After Dinner: Work in subgroups

Friday, 12 November

8:30 am

9. Review and finalize sections of the Recovery Plan:
    - Section 10: Threats; Overview of Goodman et al. 2002 report
    - Additional work in subgroups

12:00 pm – Lunch Break

10. Review and discuss work completed in subgroups
11. Summarize progress, identify and assign tasks

Adjourn – late afternoon